WHAT IS CLAIMED IS:

1. A method for resisting plaque formation in a tissue, the method comprising:

providing at least one implantable medical device;

identifying a configuration of at least one zinc-containing component which, when coupled to the at least one implantable device and implanted in the tissue, will inhibit plaque formation;

coupling the at least one zinc-containing component to the implantable medical device in the identified configuration; and

implanting the at least one device so that the zinc-containing component inhibits plaque formation.

2. A method as in claim 1, wherein the tissue is selected from the group consisting of arterial tissue, venous tissue, heart tissue, natural graft tissue, man-made graft tissue, and genetically engineered tissue.

3. A method as in claim 1, wherein providing the at least one implantable device comprises providing at least one device selected from the group consisting of a stent, a graft, a stent-graft, a gel, a carrier, a zinc-anchoring device, a compound, a balloon-expandable device, and a catheter.

4. A method as in claim 3, wherein providing the at least one implantable device comprises providing at least a biodegradable stent.

5. A method as in claim 1, wherein the at least one zinc-containing component comprises at least one zinc salt.

6. A method as in claim 5, wherein the at least one zinc salt is selected from the group consisting of acetate, ascorbate, aspartate, butyrate, caproate, caprylate, carbonate, chromate, citraconate, citramalate, citrate, EDTA, formate, fumarate, gallate, gluconate, halides, iodate, lactate, laurate, laureate, malate, maleate, malonate, metaphosphate, methansulfonate, monophosphate, myristate, nitrate, octoate, oleate, orotate, orthophosphate, oxalate, oxides, palmitate, permanganate, phenolsulfonate, phosphate,

picolinate, propionate, pyrophosphate, salicylate, selenate, stearate, succinate, sulfate, sulfonate, tannate, tartrate, tetrametaphosphate, titanate, transferrin, tripolyphosphate, undecylate, and valerate.

7. A method as in claim 1, wherein the at least one zinc-containing component comprises one or more zinc chelates.

8. A method as in claim 1, wherein identifying a configuration of at least one zinc-containing component includes selecting a component to provide ionic zinc when the device is implanted in the blood vessel.

9. A method as in claim 1, wherein identifying a configuration of at least one zinc-containing component includes selecting an amount of the at least one component for coupling with the device, wherein the amount is selected to provide an ionic zinc concentration in an area of the blood vessel adjacent the implanted device of between about 1.0 picomolar and about 500 millimolar.

10. A method as in claim 1, wherein identifying a configuration of at least one zinc-containing component includes selecting the configuration so as to provide plaque inhibition for at least a target duration.

11. A method as in claim 10, wherein the target duration is at least about six months.

12. A method as in claim 1, wherein identifying a configuration of at least one zinc-containing component includes selecting the configuration so as to provide sustained-release of ionic zinc.

13. A method as in claim 1, wherein coupling the at least one zinc-containing component to the implantable medical device comprises selectively depositing the component over a portion of the device.

14. A method as in claim 13, wherein the at least one zinc-containing component is deposited primarily on a tissue-facing surface of the device.

15. A method as in claim 1, wherein coupling the at least one zinc-containing component to the implantable medical device comprises:

coupling a zinc chelator to the device; and

releasably coupling the at least one zinc-containing component to the chelator.

16. A method as in claim 15, further comprising polymerizing the chelator.

17. A method for treating a blood vessel, the method comprising:

identifying a diseased location along the blood vessel for treatment;

determining that the blood vessel at the diseased location is susceptible to plaque formation if treated by device implantation;

selecting an implantable medical device coupled with at least one zinc-containing component in response to the determining step; and

implanting the selected medical device along the diseased location such that the zinc-containing component inhibits formation of plaque.

18. A method as in claim 17, wherein selecting an implantable medical device coupled with at least one zinc-containing component comprises selecting at least one device from the group consisting of a stent, a graft, a stent-graft, a gel, a carrier, a zinc-anchoring device, a compound, a balloon-expandable device, and a catheter.

19. A method as in claim 17, wherein the at least one zinc-containing component comprises at least one zinc salt.

20. A method as in claim 19, wherein the at least one zinc salt is selected from the group consisting of acetate, ascorbate, aspartate, butyrate, caproate, caprylate, carbonate, chromate, citraconate, citramalate, citrate, EDTA, formate, fumarate, gallate, gluconate, halides, iodate, lactate, laurate, laureate, malate, maleate, malonate, metaphosphate, methansulfonate, monophosphate, myristate, nitrate, octoate, oleate, orotate, orthophosphate, oxalate, oxides, palmitate, permanganate, phenolsulfonate, phosphate, picolinate, propionate, pyrophosphate, salicylate, selenate, stearate, succinate, sulfate, sulfonate, tannate, tartrate, tetrametaphosphate, titanate, transferrin, tripolyphosphate, undecylate, and valerate.

21. A method as in claim 17, wherein the at least one zinc-containing component comprises one or more zinc chelates.

22. A method as in claim 17, wherein selecting an implantable medical device coupled with at least one zinc-containing component includes selecting a component to provide ionic zinc when the device is implanted in the blood vessel.

23. A method as in claim 17, wherein selecting an implantable medical device coupled with at least one zinc-containing component includes selecting an amount of the at least one component for coupling with the device, wherein the amount is selected to provide an ionic zinc concentration in an area of the blood vessel adjacent the implanted device of between about 1.0 picomolar and about 500 millimolar.

24. A method as in claim 17, wherein selecting an implantable medical device coupled with at least one zinc-containing component includes selecting a configuration of the zinc-containing component so as to provide plaque inhibition for at least a target duration.

25. A method as in claim 24, wherein the target duration is at least about six months.

26. A method as in claim 17, selecting an implantable medical device coupled with at least one zinc-containing component includes selecting a configuration of the zinc-containing component so as to provide sustained-release of ionic zinc.

27. A method as in claim 17, wherein selecting an implantable medical device coupled with at least one zinc-containing component comprises selecting a device with the zinc-containing component deposited over a portion of the device.

28. A method as in claim 27, wherein the at least one zinc-containing component is deposited primarily on a tissue-facing surface of the device.

29. A method as in claim 17, wherein selecting an implantable medical device coupled with at least one zinc-containing component comprises selecting a device with the zinc-containing component releasably coupled to the device by means of a chelator.

30. A method as in claim 29, wherein the chelator is polymerized.

31. A method for coupling at least one zinc-containing component with an implantable medical device to enhance plaque resistance, elastin production or both, in a tissue, the method comprising:

coupling at least one binding agent with at least one surface of the implantable medical device; and

coupling the at least one zinc-containing component with the at least one binding agent.

32. A method as in claim 31, wherein coupling the at least one binding agent with the at least one surface comprises coupling a chelator with the surface.

33. A method as in claim 32, further comprising polymerizing the chelator.

34. A method as in claim 31, wherein the at least one binding agent comprises allylamine linked with polyaspartate, wherein coupling the at least one zinc-containing component comprises coupling the zinc-containing component with the polyaspartate.

35. A method as in claim 31, wherein the zinc-containing component comprises at least one zinc salt.

36. A method as in claim 35, wherein the at least one zinc salt is selected from the group consisting of acetate, ascorbate, aspartate, butyrate, caproate, caprylate, carbonate, chromate, citraconate, citramalate, citrate, EDTA, formate, fumarate, gallate, gluconate, halides, iodate, lactate, laurate, laureate, malate, maleate, malonate, metaphosphate, methansulfonate, monophosphate, myristate, nitrate, octoate, oleate, orotate, orthophosphate, oxalate, oxides, palmitate, permanganate, phenolsulfonate, phosphate, picolinate, propionate, pyrophosphate, salicylate, selenate, stearate, succinate, sulfate, sulfonate, tannate, tartrate, tetrametaphosphate, titanate, transferrin, tripolyphosphate, undecylate, and valerate.

37. A method as in claim 31, wherein the at least one zinc-containing component comprises one or more zinc chelates.

38. A method as in claim 31, wherein coupling at least one binding agent comprises coupling the agent with at least one device selected from the group consisting of a stent, a graft, a stent-graft, a gel, a carrier, a zinc-anchoring device, a compound, a balloon-expandable device, and a catheter one stent.

39. A method as in claim 31, wherein coupling the at least one zinc-containing component with the biding agent includes selecting an amount of the at least one zinc-containing component, wherein the amount is selected to provide an ionic zinc concentration in an area of the blood vessel adjacent the implanted device of between about 1.0 picomolar and about 500 millimolar.

40. A method for enhancing elastin production of a tissue, the method comprising:

identifying an area of tissue which may benefit from enhanced elastin production;

implanting at least one implantable medical device at or near the area of tissue, the device comprising at least one zinc-containing component; and

promoting elastin formation at or near the area of tissue with the at least one zinc-containing component of the implantable medical device.

41. A method as in claim 40, wherein identifying an area of tissue comprises identifying an area of tissue selected from the group consisting of arterial tissue, venous tissue, heart tissue, natural graft tissue, man-made graft tissue, and genetically engineered tissue.

42. A method as in claim 41, wherein the area of tissue comprises an area within or adjacent to an abdominal aortic aneurysm.

43. A method as in claim 40, wherein the at least one zinc-containing component comprises at least one zinc salt.

44. A method as in claim 43, wherein the at least one zinc salt is selected from the group consisting of acetate, ascorbate, aspartate, butyrate, caproate, caprylate, carbonate, chromate, citraconate, citramalate, citrate, EDTA, formate, fumarate, gallate, gluconate, halides, iodate, lactate, laurate, laureate, malate, maleate, malonate,

metaphosphate, methansulfonate, monophosphate, myristate, nitrate, octoate, oleate, orotate, orthophosphate, oxalate, oxides, palmitate, permanganate, phenolsulfonate, phosphate, picolinate, propionate, pyrophosphate, salicylate, selenate, stearate, succinate, sulfate, sulfonate, tannate, tartrate, tetrametaphosphate, titanate, transferrin, tripolyphosphate, undecylate, and valerate.

45. A method as in claim 40, wherein the at least one zinc-containing component comprises one or more zinc chelates.

46. A method as in claim 40, wherein the at least one device is selected from the group consisting of a stent, a graft, a stent-graft, a gel, a carrier, a zinc-anchoring device, a compound, a balloon-expandable device, and a catheter stent.

47. A method as in claim 40, wherein the at least one zinc-containing component is coupled with the device in an amount sufficient to provide an ionic zinc concentration at or near the area of the tissue of between about 1.0 picomolar to about 500 millimolar.

48. A method as in claim 40, wherein the promoting step raises elastin content of the area of tissue to an enhanced elastin content which is significantly greater than a normal elastin content.

49. A method as in claim 48, wherein the area of tissue has the normal elastin content prior to the implanting step.

50. A method as in claim 40, wherein the identifying step comprises identifying an area of tissue which has a deficient elastin content which is significantly less than a normal elastin content.

51. A device for inhibiting plaque formation, promoting elastin production, or both, the device comprising:

at least one implantable medical device; and

at least one zinc-containing component coupled with the device.

52. A device as in claim 51, wherein the at least one implantable medical device is selected from the group consisting a graft, a stent, a stent-graft, a gel, a zinc-anchoring device, and a topical compound or complex.

53. A device as in claim 51, wherein the at least one zinc-containing component comprises at least one zinc salt.

54. A device as in claim 53, wherein the at least one zinc salt is selected from the group consisting of acetate, ascorbate, aspartate, butyrate, caproate, caprylate, carbonate, chromate, citraconate, citramalate, citrate, EDTA, formate, fumarate, gallate, gluconate, halides, iodate, lactate, laurate, laureate, malate, maleate, malonate, metaphosphate, methansulfonate, monophosphate, myristate, nitrate, octoate, oleate, orotate, orthophosphate, oxalate, oxides, palmitate, permanganate, phenolsulfonate, phosphate, picolinate, propionate, pyrophosphate, salicylate, selenate, stearate, succinate, sulfate, sulfonate, tannate, tartrate, tetrametaphosphate, titanate, transferrin, tripolyphosphate, undecylate, and valerate.

55. A device as in claim 51, wherein the at least one zinc-containing component comprises one or more zinc chelates.

56. A device as in claim 55, wherein the one or more chelates are polymerized.

57. A device as in claim 51, wherein the at least one zinc-containing component provides ionic zinc when the device is implanted.

58. A device as in claim 57, wherein the at least one zinc-containing component provides an ionic zinc concentration in an area adjacent the implanted device of between about 1.0 picomolar and about 500 millimolar.

59. A device as in claim 51, wherein the at least one zinc-containing component provides plaque inhibition for at least a target duration.

60. A device as in claim 59, wherein the target duration is at least about six months.

61. A device as in claim 51, wherein the at least one zinc-containing component is selectively deposited over a portion of the device.

62. A device as in claim 61, wherein the at least one zinc-containing component is deposited primarily on a tissue-facing surface of the device.